

Close Contact Us CODA Print Describation of EP1211212

Result Page

derived theretrom. SERVICES. The especenet® Terms and Conditions of use are also applicable to the use of the translation tool and the results original document sufficiently closh in the target language. This service is not a replacement for professional translation Notice: This translation is broduced by an automated process; it is interided only to make the technical content of the

control of a drive of a crease sword to rebates of a number of laminar subject-matters, which single in particular follows one another, with the help of a mechanism according to the sword crease principle and an apparatus to the [0001] The invention relates to a method to rebates of a number of laminar subject-matters, which single in particular

phically Parallelfalzungen become generated, while become performed with the sword crease works so called with which additional crosse works, which work according to the bag crosse principle. With the bag crease works the practice there are both pure sword folding machines, and so called combination folding machines, are provided Estawaizen that by the hip transported becomes, from the described procedure a sharp edged crease break results. In Falzwalzen into the crease rolling gap, By frictional engagement between the laminar subject-matter and the movement vertical to the plane of the laminar subject-matter is in-struck the laminar subject-matter between the two esseutistly paratiel, which can be folded, is to the plane defined by the crease rolling axies, By the crease sword by the crease rolling axies. Before the grooving the laminar subject-matter between Falzwalzen and crease sword movable, the crease sword and the crease rolling gap lies in a plane, which cuts the plane bottom right angle defined arranged to the creaso rolling gap. The crease sword is toward vortical to the plane defined by the crease rolling axies quections stranged Falzwalzen parallel in the operation with their exes of rotation and a parallel crease sword [0.05] A crease work working according to the sword crease principle exhibits two rotary moving to opposite follows one another.

the dead points of the movement unique fixed. brough of the crease sword realized becomes. Simultaneous one is also the amplitude, with other words the layer of drive members only a general movement unitary for all laminar subject-matters of a production fot and/or. Velocity different crease conditions exist for various speeds. A major drawback of such drive systems is that with mechanical which proportional with the engine speed rises, if direct of the drive shalt transmitted. With other words in each case means of a thrust crankshaft-and-connecting-rod drive realized. The typically made drive with constant driving speed, deceases. Movement of the crease sword: For example the sword movement can be can controlled or however by independent single drive for the sword movement used. The drive system can implement thereby on several kinds the which direct or indirect of the main shaft of the folding machine becomes tapped, Alternative one can become also an [0003] The vertical, typically linear sword movement can become different realized. A drive can become inserted, barailei preak crease ling

Krenzbrinch(sisznuden: A potrom Krenzbrinch(sisznud understands ond a crosse line, which runs vertical to a present

event-controlled. ponue, thus in the obligation run with the clock frequency of the folding machine, or clock-unbound, with other words [0004] A synchronization of the sword movement on the passage of the laminar subject-matters can take place clock-

top dead center, i.e. the brake is switched on and the clutch is switched off, after a signal of the sword drive became release the sword atroke, a brake dissolved and the clutch is switched on. The crease sword becomes stopped in the drive. The arrival of the laminar subject-matter which can be folded decomes detected over a sensor. In order to claukayati-and-connecting-tod drive, which is connected over a brake clutch combination frictional with the machine award crease unit and which Falswalson of the sword crease work coupled. The actual sword drive consists of a queec with the main drive of the first crease work, the conveyor bolls, which carry the laminar subject-matters to the machine described, which on the known event-controlled sword crosse principle based. In this case the sword drive is (0005) In the EP 0,732,293 az a method becomes the optimization of the production management of a folding

stopped in the top dead center. marter which can be folded, which rain into the crease work, the crease sword stroke becomes triggered and again ou oue the length of the laminar subject-matter. By means of the defection of the tear edge of the laminar subjectwork achieved. A detector element or a sensor corresponding distance up to the notice in the crease work set becomes anplect-matter straight is hit to the time into the pair of crease rollings, if its leading edge has the stop in the crease \$2.139 disclosed becomes, as a crease sword price increase becomes in such a manner beformed that the laminar [000e] The determination of the point of time lag can take place for example on the subsequent paths: In the DE 33

formed that it switches the folding machine off, if first or the second signal will not deliver particular time before to the corresponding in each case position of the crease sword in each case to control means. The control means are so committee, detecting means are provided for at least two positions of the crease sword, which deliver a reaching of which covers a pneumatic stroke drive. In order to prevent with a malfunction of the crease sword drive a larger [0007] Other state of the art forms the EP 0,987,210 a2. In this document a crease sword drive becomes disclosed,

[0008] The other a folding machine becomes disclosed in the EP 0,522,408 A1, which at least one swort crease work

and an investor exhibits and which by it is characterised that the drive of the folding machine exhibits a single drive for the sword crease work and the investor, which by means of a programmable controller coordinated becomes.

(009) [009] The lets that the phase postions actives for the mastern dock of everyone the expendic current, intensivation and periodic sequence of the following the sequence of the following the sequence of the closest postion, thus that other reasons to the fact guided the bloom and existing the event controlled there is preferred to the closest bound cross sword drive. Advorse one is with the fact blooms that the event controlled there is preferred to the closest bound cross sword drive. Advorse one is with the fact bowered that the event that the fact and the controlled drive is preferred to the controlled drive. Advorse one is with the fact one process that the process of the controlled one is a relative to the controlled one in the processor section the drive. Advorse one is the controlled one of cluster and beautiful to the controlled one of clusters and beautiful to the controlled one of clusters and beautiful to the controlled on the control

movement of the crosses sword tragecred analysis resolution to complete should be sentenced by a linear language sword of the smoothers and the crosses sword of the crosses sword in this elegancies, which substitute and beginning the crosses and other cro

home position started will must.

The obsertion started will must be obserted the obsertion of the consistency will must be obserted with chain it in the obsertion of a funct of a coses measure, which chainst a reduced worsh in this operation makes and a metalization in the obsertion of a funct of a coses measure, which chainst obsertive support ones, possible and an interpretability of the city of the city of the continue of

[002] Pirs object becomings by the method with the features according to claim 1 and the mechanism with the features according to claim 10 dissolved

[000012] The solution of the conservation of the destination of the received of the control of the controlled of the control o

complete zero is, For export is clear that an avoidance of times, at which the velocity profile is zero, due to which subject-matter. It, if the time course is free of intervals, is particularly favourable on which the velocity profile is a superposition from a cyclic portion and at least an other portion, which are adapted to the individual laminar According to invention thus the necessary velocity profile for a certain laminar subject-matter the bottom crease sword bargion[at the barameters cover aspects of the sucking act price increase, which depends on the sword drivebary for mechanism to rebates. The velocity profile is generally dependent of various machine parameters, In arrival time at a second, late time of the laminar subject-matter with known acceleration of the subject-matter on the and its speed on first, carly stage for mechanism to rebates, for example to a front notice, which are precalculated procedure calculated becomes, can become certain. For example can from the removal of the laminar subject-matter tor the velocity profile of the crease sword, which either from known velocity profiles selected or but for the current the arrival time of the laminar subject-matter the bottom crease sword be precalculated, so that the point of time lag it is plust least bactist calculation from machine, process and material parameters or by individual measurement, can before strival at the crosse work go throughly becomes according to invention found. With the knowledge of the speed, laminar subject-matter at a location with known distance before the crosse work, which the laminar subject-matters aingle laminar subject-matters atrows around a central phase position to the machine clock. The presence of the slight differs from the first certain movement of the advantage, performed. As already mentions, the phase position of words, it becomes an advantage with a first certain movement and a retreat with a second movement, which at least supermonische movement, which is in a pre and a refreat of the sword divided, is particularly favourable. With other that it possible to consider the event of the individual straight laminar subject matter incoming into the crease work. A descriped cyclic, essentially periodic portion, which is typically anhair indirech, and on the other hand an other portion, [0074] Escontable way exhibits the velocity profile of the crease sword of at least two portions; to the already

Of the velocity profile with dimensions in so to be understood, which is a decicted with intentions.

Of the velocity profile with dimensions in a so to be understood, which is a decicted with intentions in the velocities measurement in the profile invention or profile inventions to the crosses works in the measurement of the profile invention or the council or invention in the crosses works. In the measurement is uncer the cyclic movement of the crosses works, which single in particular follows one analytic, on the curvacy event to him any experimental and, so that scatterings becomes semilar profile profile in the particular follows one analytic, on the veryage profile measurement and, so that scatterings to be able, with the homes responsible to add the profile profile in the particular followings in the working not better the council or the particular profile in the particular profile in the particular followings in the working not be to the particular profile in the working not be to the particular profile in the working not be to the particular profile in the working not be a control.

reversal possible is not, since the first derivative in the extreme values of the associated local profile disappears. A bottom interval of the time course of the velocity profile, on which the velocity profile is complete zero, thus a portion

http://epo.worldlingo.com/wl/epo/epo.html?Sl:l:D: EP12112&Sl:ED_FORMAT=E&ACT... 1/12/09

before the working of the month of the month

combougues of the switching time of the drive unit and the stip time of the crease sword.

eccessible location of the machine, and so that the folded lamines subject-oratic election of the machine, and so that the folded lamines subject.

For the expectation of the machine, and so that the folded lamines subject oratic election of the cross sword can in this case by direction of notion makes a passable and/or by deceloration of the oratic election of the cross sword can in this case by direction of notion makes and the control of the cross state of the cross sword can in this case by direction of notion makes and the control of the cross state of the cross of

[0018] Other advantages and favourable development of the invention become shown on the basis the subsequent fig and their description.

:hetab ni zwońz II (6100)

brown entering a fund to the formation and or and transition of an interference and to uncolored and to complete formation and the formati

1. Carlons of Michology of the mochanism according to involvion to the control of a drive of a crease sword to rebates of a number of laminer subject, medicine and the topological connection of the single units, which the [0000] The Fig. 1 shows the schematic structure and the topological connection of the single units, which the

18 causimized oxec a conocition pio excipaide of gens aurojo, conica) a binsi combination out; perseau ceases executive described and a consideration of the consideration of th

would Stand detected the A movem detected to an appropriate to its offern execution and the standard of the detected of the de

cuesse sword 34 becomes driven with the certain velocity profile. necessary velocity profile of the crease sword 34, The movement of the crease sword 34 becomes triggered, and the length of the minimum distance of the crease sword becomes 34 the hillwalten 38 made beside the calculation of the gehour that also a calculation of the distance between the two furning points, dead points, the movement and the switching time of the computing unit 18 and the slip time of the crease sword 34 are also included into the calculation. connection to the exchanging data 20 to the computing unit 18, in a data storage unit is deposited, in particular the 34 either calculated or but from deposited velocity profiles selected, which favourable-proves 22, which exhibits a wovement of the crosse sword becomes bossiste. Similifying new accounts for view crosses sword buscejonisted to repeace according to the sword crease principle, so that a determination of the time of releasing the mechanism rebates the certain. Thus the time of the arrival of the land as subject-matter to at the mechanism can be profile of the laminar subject, mutter 12 with sufficient precision between the location with known distance D and the with the initial conditions distance D and speed V with describilly known movement law can become the velocity other words, the major influences on the movernort of the laminar analost-matter ?? are essentially known, so that Correction values, how they are for example due to a transportation slip or such required, can find consideration. With can become consider and thus the point of time led of the crease sweet movement calculated in the computing unit. of the detector 14 and the front notice 36 the time of the arrival of the laminar subject-matter 12 at the mechanism [0022] From the knowledge of the speed V of the laminar subject matter 12 and the distance D between the position

(1620) The a kovenebranch de devolpement of the morehout meter computing with a lapplay and an input mit control against 25 of the amount of the control and t

[0004] Between the first usual Carlo as could be actual cross word 4 by a La an active common 42, which averous collections are and such a things Library which acts a things Library and a considerable and connecting and cuts a things Library and the connecting and force or a goar wheele tack conhistion. The crosses sword 43 has beinness trablecter and canner connecting and or connecting and or considerable and connecting and connections are designated by reason in essentially perpendicular direction the believable or by Library in the arrived at the front notice 26, pressed in essentially perpendicular direction to the transport direction on the influence or the connection of the processing of the processing and their influence of the connection of the processing and the processing of the processing and the processing of the pro

http://epo.worldlingo.com/w//epo/cpo.html?\$BED_EP1211212&\$BED_EORMAP*-F&ACT... 1/12/09

Lage 4 of 4 ratobesu estent office

18 linked with a connection to the exchanging data 42 with the computing unit, so that with entry of a corresponding torned can become whether it concerns with the laminar subject-matter crease width unit a product. This detector 40 is [0022] In an other favourable development the invention exhibits a rear edge detector 40, with whose assistance

exert the quice nuit can percente 30 of the crease award when desired 34 stobbed moved with another velocity profile

the exchange of data and/or control signals 42 the computing unit. matter IS at the mechanism rebates at the rear edge detector 40, which becomes 18 transmitted over the connection the laminar subject-matter 12, becomes generated the determination of the time of the aminal of the laminar subject-[0026] In an elementive embodiment of the invention of least a signal, for example with arrival of the leading edge of

become 34 certain after the invention process permeen rear edge derector 40 and front notice 36 then the time of releasing the movement of the crease sword can [0053] trom the knowledge of the speed V, the which analogue described above can take place, and the distance E

the crease work or the folding machine to the exchange of data and/or control signals [0038] In another favourable development of the investion a connection exists 44 to the actual machine control 46 of

[0059] A such mechanism according to invention can become in a single crosse work or in folding machines a realized.

REFERENCE SYMBOL LIST

http://epo.worldlingo.com/w/vepo/epo.htm/?SEED-EP1211212&SEED-FORMAT=E&ACT... 1/12/09

14 Detector

16 Connection to the exchange of data and/or control signals

18 Computing unit

28 Connection to the exchange of data and/or control signals 26 Man-machine Interface 24 Connection to the exchange of data and/or control signals

44 Connection to the exchange of data and/or control signals 42 Connection to the exchange of data and/or control signals

22 Data storage unit

A Speed of the laminar subject matter E Distance between rear edge detector and front notice Distance between detector and front notice B Direction of movement of the crease sword

A Transport direction 46 Machine control.

40 Rear edge detector 38 Falzwaize 36 Front notice 34 Clease sword 32 Active compound 30 Drive unit

20 Connection to the exchanging data

12 laminar subject-matter

sueam trogenerT OI